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**LIFE COLORS OF *PÆCILIA LIMANTOURI*, AND DESCRIPTION OF A NEW HEROS
FROM MEXICO.**

BY HENRY W. FOWLER.

The Academy has received a small collection of fishes from Tamaulipas, Mexico. They were secured January 16 by Mr. S. N. Rhoads, while on his recent visit to Mexico, in the warm waters of the Victoria river near Victoria. This is a small stream tributary of the Rio Soto la Marina, at the foothills of the Sierra Madre Mountains in western Tamaulipas.

The material is in excellent condition, so that it is possible to give the life colors of the *Pæcilia*, which were unknown.

PÆCILIIDÆ.

1. *Pæcilia limantouri* Jordan and Snyder.

1900. *Pæcilia limantouri* Jordan and Snyder, Bull. U. S. Fish Comm., p. 129, fig. 10; Rio Tamesoe, near Tampico, Tamaulipas, Mexico (Coll. J. O. Snyder, No. 6,165, L. Stanford, Jr. Univ. Mus.).

Color in alcohol of adult male. Deep olivaceous above, and becoming paler where it extends down along the middle of the side. Posteriorly the dark upper color extends lower. Each scale on the upper surface margined with darker, and the side of the body sprinkled with diffuse dusky specks. Chin and jaws dusky. Lower surface of the head cadmium-yellow, burnished with brassy-orange, and then becoming whitish below. Cheek and lower opercle marked with diffuse dusky specks. Abdomen and lower half of the body pale orange, becoming whitish below, and grayish posteriorly. Five or six longitudinal rows of bright orange spots running along the side, the uppermost following the lateral line, and the others parallel. Dorsal with its basal half dark, the rays deep gray, and the membranes black. Outer portion of the dorsal broadly bright orange. Caudal dark for two-thirds its basal portion, the median basal scales more or less silvery-gray, and then a broad black transverse median band formed by the black membranes, the rays grayish. Outer portion of the caudal broadly deep orange. Pectoral very dilute brown, the base obscurely orange, and then a pale slaty blotch. Ventrals and anal dilute orange. Iris deep brown.

Considerable variation occurs, many examples having as many as a

dozen distinct vertical dusky-brown bars on the side of the back. Other examples show a blackish axillary blotch or several rather large dusky blotches either at the base of the caudal, on the back, or on the abdomen. Some examples are almost black above, and with intense orange on the fins. Nineteen examples.

Adult female. Olivaceous above, and extending over the greater part of the side, each scale margined with darker. About six distinct longitudinal series of dusky dots along the side, parallel with the lateral line. Lower surface of the body pale brown or brownish-white, somewhat silvery on the chest. Just above the anal many pale diffuse dusky specks. Dorsal, caudal and pectoral dilute brown, a little deeper basally. Anal with a pale orange tinge. Ventrals whitish. Many have the anal rather bright orange, and dark olivaceous blotches distributed with the same variations as seen with the dark blotches of the males. One female has the three series of dots running parallel to and below the lateral line, orange-ochraceous. Thirty-six examples mostly gravid with ova.

A large number of both young males and females show the coloration of the adult female, except the distinct series of dots along the side. The lower surface is almost entirely pale and uniform. Anal pale like the ventrals. The variation of dusky blotches is found in most of the examples, even the smallest.

This species has been taken also in the Rio Ixtla, at Puente de Ixtla,¹ Morelos, Balsas and La Antigua.²

CICHLIDÆ.

2. *Heros teporatus* sp. nov.

Head $2\frac{3}{5}$; depth $2\frac{1}{2}$; D. XV, 10; A. V, 8; P. I, 14; V. I, 5; scales 29 in a lateral series to the base of the caudal, about 17 in the upper part of the lateral line; 5 scales between the front of the dorsal and the lateral line, and 12 between the latter and the origin of the spinous anal; width of head 2 in its length; depth of head $1\frac{1}{8}$; snout $3\frac{1}{4}$; eye $3\frac{1}{8}$; interorbital space $3\frac{1}{2}$; fourth dorsal spine $2\frac{3}{8}$; least depth of caudal peduncle $2\frac{1}{2}$; anal $1\frac{1}{4}$; fifth anal spine $2\frac{1}{10}$.

Body elongate, compressed, the greatest depth about the origin of the spinous dorsal, and the back not conspicuously elevated. Upper profile evenly convex, though a little more curved than the lower. Caudal peduncle deep, compressed, and its length about two-thirds its depth.

Head rather triangular, compressed, and its depth at the posterior

¹ JORDAN AND SNYDER, *Bull. U. S. Fish Comm.*, 1900, p. 130.

² MEEK, *Field Col. Mus. Pub.*, 65, Zool., Ser. III, No. 6, 1902, p. 106.

margin of the gill-opening about equal to its length. Both profiles are slightly convex. Snout conic and rather short. Eye small, well anterior, and high. Mouth small, horizontal, and the jaws about equal. Maxillary small, and not reaching opposite the front rim of the orbit. Lips rather fleshy, and the lower forming a free fold across the mandible. Teeth uniserial, conic, and with a patch of villiform ones directly behind. Nostrils well separated, high, and the anterior midway between the tip of the snout and the front of the orbit. Interorbital space convex. Preorbital a little over half the width of the eye.

Gill-opening carried forward below the anterior rim of the orbit.

Scales rather large, finely ctenoid, and of about even size. Head scaly, except the snout and interorbital space, and about five rows on the cheek. Small scales along the bases of the fins, those along the spinous dorsal forming a low sheath. Lateral line high at first, interrupted below the posterior portion of the dorsal, then beginning on the middle of the side and running over eleven scales in a straight line to the base of the caudal.

Fourth to seventh spines of dorsal even and highest. Longest dorsal rays a little longer than the longest spines. Last anal spines longest, and a little shorter than the longest anal rays. Caudal truncate, with rounded corners. Pectoral rather long, reaching opposite the origin of the spinous anal. Ventral inserted a little behind the origin of the pectoral and reaching almost to the origin of the spinous anal.

Color in alcohol more or less olivaceous-brown, with about nine broad darker vertical bands fading out below. The one at the end of the pectoral with a black blotch, and another black blotch at the base of the median caudal rays. Fins dull olivaceous-dusky, the ventrals somewhat paler. Lower surface of the body pale.

Length $1\frac{5}{8}$ inches.

Type No. 24,242, A. N. S. P. Victoria, on the Victoria river, a tributary of the Rio Soto la Marina, Tamaulipas, Mexico. Coll. S. N. Rhoads.

One example. This species is very close to *Heros pavonaceus* Garman,³ differing in the fin radii, the fewer vertical bands and only having two black blotches on the sides. The first of these is placed at the end of the pectoral just below the lateral line, and the other at the middle of the base of the caudal. In *Heros pavonaceus* they are more

³ *Bull. Mus. Comp. Zool.*, VIII, p. 93; from a spring near Monclova (Coll. Dr. Palmer).

or less ocellated and vertically expanded, while in *H. teporatus* they are rounded black spots.

(*Teporatus*, made somewhat warm; on account of the warm springs flowing into the Victoria river where this species was taken.)